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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/038,906 | 01/08/2002 | Cheng-Ju Chen | 3313-0457P-SP | 9415 |

2292 7590 10/13/2006

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EXAMINER

JARRETT, SCOTT L

ART UNIT PAPER NUMBER

3623

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/038,906 | CHEN ET AL. | |
| | Examiner | Art Unit | |
| | Scott L. Jarrett | 3623 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-6 and 8-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This **Final** Office Action is in response to Applicant's Amendment filed July 26, 2006. Applicant amendment amended claims 1-6 and 8-13, canceled claim 7 and added new claims 14-25. Current claims 1-6 and 8-25 are pending.

Response to Amendment

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

The Objection to the Title is withdrawn in response to Applicant's amendment to the Title.

The 35 U.S.C. 112(2) rejection of Claims 2-3 and 12-13 is withdrawn in response to Applicant's amendments to claims 2-3 and 12-13.

Response to Arguments

3. Applicant's arguments with respect to claims 1-6 and 8-25 have been considered but are moot in view of the new ground(s) of rejection.

It is noted that the applicant did not challenge the Official Notice(s) cited in the previous office action(s) therefore those statement(s) as presented are herein after prior art. Specifically it has been established that it was old and well known in the art at the time of the invention:

- to compare actual to forecasted demand/production provides a mechanism for determining (measuring, calculating, evaluating, etc.) the accuracy of production forecasts (i.e. forecasted demand – actual production/customer orders = forecast error); and

- to mark (flag, tag, note, etc.) a value that one does not wish to have recalculated each time a loop (recursion, etc.) is calculated is commonly used when intermediate values are not required/desired and/or as a mechanism for reducing the “processing” requirements of the calculation (loop, algorithm, subroutine, etc.).

Claim Objections

4. Claims 14-25 are objected to because of the following informalities. Appropriate correction is required.

Regarding Claim 14, Claim 14, step 9, recites “forecasted purchase order.,” instead of the intended “forecasted purchase order;”

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 14-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The disclosure fails to state or teach one of ordinary skill in the art how to determine “when the surplus and excess demands are within a *reasonable range*” and/or “over a *reasonable range*” (emphasis added; Claim 14, Step 8). Without this disclosure one skilled in the art would be unable to practice the invention without undue experimentation.

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 14-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 15-25, Claims 15-25 recite the limitation "the invention" in Claim 14. There is insufficient antecedent basis for this limitation in the claim. Examiner interpreted the claims to read "the *method* as recited in claim 14" for the purposes of examination.

Regarding Claims 14-25, Claims 14-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The disclosure does not clearly define the phrase "*reasonable range*" (emphasis added; Claim 14, Step 8). The phrase "*reasonable range*" as claimed could be interpreted to include any value for the surplus and excess demands or average number and without further definition the phrase as claimed is vague and indefinite.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-6 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver et al., Inventory Management and Production Planning and Scheduling (1998).

Regarding Claim 1 Silver et al. teach an inventory management system and method comprising (Paragraphs 1-2, Page 597; Bullet Numbers 1-4, Page 601; Section 5.4, Pages 604-609; Equation 15.1; Tables 7.7; 15.1-15.8; Figures 13.1, 15.2):

- delivering a production order of the day into a (material requirements planning) subsystem (system, code, module, server, device, etc.; production, gross requirements; Paragraph 1, Page 540; "Order entry, promise, follow-up", Element 4, Figures 13.1 and 15.2; "Production", Table 15.1-15.3, 15.8);

- generating an actual purchase order (net requirements; Last Paragraph, Page 602; Pages 605-606; Equation 5.1; Table 15.8);

- calculating a production order (gross requirements for current time period/interval) and a forecast order (gross requirements for future time period; Table 15.8; "forecasts", Bullet 4, Page 601);

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- comparing (contrasting) a production order (production) and a forecast order (demand; Figure 13.2; "Demand Management", Element 2, Figure 13.1; Table 15.1; Figure 15.1; Paragraph 1, Page 594; Paragraph 1, Page 595);
 - generating a forecasted purchase order (planned order releases; Table 15.8);
- and
- forecasting an upcoming production quantity and an upcoming shortage (project gross requirements; projected net inventory; Pages 607-608; Table 15.8).

Silver et al. does not expressly teach calculating the *difference* of a production order and a forecast order as claimed.

Official notice is taken that comparing (contrasting) actual to forecasted demand/production is old and very well known as providing a mechanism for determining (measuring, calculating, evaluating, etc.) the accuracy of production forecasts (i.e. forecasted demand – actual production/customer orders = forecast error).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for managing inventory as taught by Silver et al. with its ability to capture forecasted demand/production and actual production (production order/releases) would have benefited from determining the *difference* between the production order and a forecast order in view of the teachings of official notice; the

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resultant system enabling users to determine and adjust for the amount of error in production forecasts.

Silver et al. does not expressly teach utilizing a marker to avoid repeatedly calculating actual order while the actual order is being processed the next time as claimed.

Official notice is taken that marking (flagging, tagging, noting, etc.) a value that one does not wish to have recalculated each time a loop (recursion, etc.) is calculated is old and well known and commonly used when intermediate values are not required/desired and/or as a mechanism for reducing the “processing” requirements of the calculation (loop, algorithm, subroutine, etc.).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for inventory control and management as taught by Silver et al. with its ability to calculate/determine a plurality of inventory values/parameters in either batch or near real-time (regenerative, net change, transaction/event driven, etc.; Last Paragraph, Page 611; Paragraphs 2-3, Page 612) would have benefited from marking (flagging, tagging, etc.) actual order in view of the teachings of official notice.

Regarding Claim 2 Silver et al. teach an inventory management system and method wherein the forecast order is generated by an Enterprise Resource Planning system (server, subsystem, etc.) based on procurement records provided by a client (user, system, device, etc.) to forecast required replenishment of quantities and material categories at a predetermined interval (Section 15.8, Page 620; Footnote, Page 602; Last Paragraph, Page 711).

Regarding Claim 3 Silver et al. teach an inventory management system and method wherein the production order relates to a build order placed by a client at a predetermined interval (Last Paragraph, Page 539; Paragraph 1 Page 540; Figures 13.1-13.2, 15.2; Table 15.5).

Regarding Claim 4 Silver et al. teach an inventory management system and method wherein delivering a production order comprises contrasting (comparing, subtracting, etc.) the production order with inventory stocks in a facility to generate a surplus stock and a shortage (stock-out; net requirements; Last Paragraph, Page 602; Pages 605-606; Equation 15.1; Table 15.8).

Regarding Claim 5 Silver et al. teach an inventory management system and method wherein the surplus stock relates to a quantity where quantity of the production order is fewer than that of the inventory stock of the facility (i.e. surplus stock is when the stock on hand is greater than the production order – inherently the definition of

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surplus; net requirements; Last Paragraph, Page 602; Pages 605-606; Equation 15.1; Table 15.8).

Regarding Claim 6 Silver et al. teach an inventory management system and method wherein the shortage relates to a quantity where the quantity of the production order is more than the inventory stock in a facility, as a base of the actual purchase order (the definition of a shortage; net requirements; Last Paragraph, Page 602; Pages 605-606; Equation 15.1; Table 15.8).

Regarding Claim 8 Silver et al. teach an inventory management system and method wherein the forecasted purchase order (planned order release) is the difference of the forecast order (gross requirement for next time interval/period) and the surplus stock (net requirements, planned order release; Page 609; Table 15.8; Equation 15.1).

Regarding Claim 9 Silver et al. teach an inventory management system and method wherein a production quantity (upcoming production quantity) and the shortage of the day (net requirements) both add up to be the amount of the production order (projected gross requirements; Pages 607-608; Table 15.8; Equation 15.1).

Regarding Claim 10 Silver et al. teach an inventory management system and method wherein the upcoming production quantity (project gross requirements) is based

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on received production orders at a predetermined interval and further to calculate the average (e.g. average demand; Paragraph 1, Page 203; Paragraph 1, Page 232).

Regarding Claim 11 Silver et al. teach an inventory management system and method wherein a predetermined interval relates to a time set up by the materials requirements planning subsystem (server) based on requests of various client ends (multiple time intervals/periods; Last Paragraph, Page 611; Paragraphs 1-2, Page 612; Tables 15.1, 15.8; Figure 15.1).

Regarding Claim 12 Silver et al. teach an inventory management system and method wherein the upcoming shortage (net requirement) is the sum of the actual purchase order (planned order receipts) and the forecasted purchase order (planned order releases; Pages 608-609; Table 15.8).

Regarding Claim 13 Silver et al. teach an inventory management system and method wherein the facility (system, plant, etc.) is to distinguish production demands of various product models (products) and implement received build orders at an enterprise end (aggregate order/production planning/forecasting; Last Paragraph, Page 548; Table 15.1; Figures 13.3 15.1; Figure 15.2, Element 1).

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11. Claims 14-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver et al., Inventory Management and Production Planning and Scheduling (1998) in view of Horne, U.S. Patent No. 7,058,587 and further in view of Rush et al., U.S. Patent No. 6,119,102.

Regarding Claim 14 Silver et al. teach a production method for control and managing inventory stocks and productions of at least one facility comprising (Paragraphs 1-2, Page 597; Bullet Numbers 1-4, Page 601; Section 5.4, Pages 604-609; Equation 15.1; Tables 7.7; 15.1-15.8; Figures 13.1, 15.2):

- delivering a production order of the day into a material requirement planning server (system, subsystem, etc.; production, gross requirements; Paragraph 1, Page 540; "Order entry, promise, follow-up", Element 4, Figures 13.1 and 15.2; "Production", Table 15.1-15.3, 15.8);

- generating an actual purchase order through the materials requirements planning subsystem wherein the actual purchase (net requirements; Last Paragraph, Page 602; Pages 605-606; Equation 5.1; Table 15.8);

- calculating a production order (gross requirements for current time period/interval) and a forecast order (gross requirements for future time period; Table 15.8; "forecasts", Bullet 4, Page 601);

- comparing (contrasting) a production order (production) and a forecast order (demand; Figure 13.2; "Demand Management", Element 2, Figure 13.1; Table 15.1; Figure 15.1; Paragraph 1, Page 594; Paragraph 1, Page 595);

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- generating a forecasted purchase order (Table 15.8);
- calculating:
 - a shortage (stock-out) being a negative quantity of inventory stock deducted from the production order (Last Paragraph, Page 602; Pages 605-606; Equation 15.1; Table 15.8);
 - a surplus stock being a positive quantity of inventory stock deducted from the production order (Last Paragraph, Page 602; Pages 605-606; Equation 15.1; Table 15.8);
 - the actual purchase order is the quantity of the shortage (stock-out; Pages 605-606; Equation 15.1; Table 15.8);
 - the forecasted purchase order is the quantity of the forecast order deducted from the surplus stock (Page 609; Table 15.8; Equation 15.1);
 - a shortage of the day is the quantity of stock-out of the day (Last Paragraph, Page 602; Pages 605-606; Equation 15.1; Table 15.8);
 - a forecasted shortage is the sum of the actual purchase order and the forecasted purchase order (Pages 608-609; Table 15.8);
- calculating a production quantity and shortage of the day (Pages 605-605; Equation 15.1; Table 15.8); and
- forecasting an upcoming production quantity and an upcoming shortage (project gross requirements; projected net inventory; Pages 607-608; Table 15.8).

Silver et al. does not expressly teach calculating the *difference* of a production order and a forecast order or subsequently calculating a surplus and excess demand being equal to the difference between the forecast order and production order, an actual production quantity is *either* equal to the inventory stock when there is a shortage *or* to the production order when there is a surplus, or a forecasted demand is *either* equal to the forecast order then the surplus/excess demands are within a (reasonable) range *or* average number, which are calculated from received production orders over a specified future time period as claimed.

Horne teaches calculating the *difference* of a production order and a forecast order or subsequently calculating a surplus and excess demand being equal to the difference between the forecast order and production order (netting, unsatisfied demand, insufficient supply, etc.; Column 12, Lines 1-32; Column 17, Lines 23-34; Column 19, Lines 20-50; Column 22, Lines 36-68; Column 46, Lines 11-30; Figure 2, Equation 1), an actual production quantity is *either* equal to the inventory stock when there is a shortage *or* to the production order when there is a surplus, or a forecasted demand is *either* equal to the forecast order then the surplus/excess demands are within a (reasonable) range *or* average number, which are calculated from received production orders over a specified future time period (ordering policies; Column 15, Lines 12-68; Column 16, Lines 1-47) in an analogous art of inventory management and production scheduling for the purposes of balancing supply and demand taking into

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account constrained materials and evaluate potential shortages for substitution (Column 2, Lines 15-33; Column 22, Lines 50-60)

More generally Horne teaches a production method that employs the managing and controlling of inventory stocks of at least one facility through a material requirements planning, enterprise resource planning, master planning, demand forecasting and reporting (e.g. excess inventory, shortage report, etc.; Figures 1C, 1D, 2; Column 1, Lines 35-53; Column 2, Lines 1-32; Column 16, Lines 25-30; Column 22, Lines 1-14; Columns 19-20) servers/subsystems.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for managing inventory as taught by Silver et al. would have benefited from determining the *difference* between the production order and a forecast order as well as calculating an actual production quantity is *either* equal to the inventory stock when there is a shortage *or* to the production order when there is a surplus, or a forecasted demand is *either* equal to the forecast order then the surplus/excess demands are within a (reasonable) range *or* average number, which are calculated from received production orders over a specified future time period in view of the teachings of Horne et al.; the resultant system enabling businesses to balancing supply and demand taking into account constrained materials and evaluate potential shortages for substitution (Horne: Column 2, Lines 15-33; Column 22, Lines 50-60).

Silver et al. does not expressly teach utilizing a marker to avoid repeatedly calculating actual order while the actual order is being processed the next time as claimed.

Rush et al. teach utilizing a marker (flag) to avoid repeatedly calculating/re-calculating order quantities and/or inventory levels each time the master production schedule (MPS regeneration) or material requirements plan (MPR regeneration) are regenerated (i.e. being processed the next time; Column 6, Line 25; Column 7, Lines 15-18; Column 8, Lines 24-68; Column 13, Lines 36-65; Column 14, Lines 2-11; Figures 2, 4, 9) in an analogous art of inventory management and controlling for the purposes of increasing the speed at which the system can be updated to take into account new/modified data values (e.g. MRP, MPS regeneration) and/or to avoid processing multiple regenerations (e.g. checking the immediate recommendation box; Column 13, Lines 43-46).

More generally Rush et al. teach a production method for managing and controlling inventory stocks and productions of at least one facility through a material requirements planning subsystem/component (Column 1, Lines 15-20; Column 3, Lines 8-30; Column 6, Lines 65-68; Column 7, Lines 1-20; Column 13, Lines 21-68; Figures 2, 4-5, 12-13).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for inventory control and management as taught by the

combination of Silver et al. and Horne would have benefited from marking (flagging, tagging, etc.) order and/or inventory information in view of the teachings of Rush et al.; the resultant system/method increasing the speed at which the system can be updated to take into account new/modified data values (e.g. MRP, MPS regeneration) and/or to avoid processing multiple regenerations (e.g. checking the immediate recommendation box; Rush et al.: Column 13, Lines 43-46).

Regarding Claim 15 Silver et al. teach an inventory management system and method wherein the forecast order is generated by an Enterprise Resource Planning system (server, subsystem, etc.) based on procurement records provided by a client (user, system, device, etc.) to forecast required replenishment of quantities and material categories at a predetermined interval (Section 15.8, Page 620; Footnote, Page 602; Last Paragraph, Page 711).

Regarding Claim 16 Silver et al. teach an inventory management system and method wherein the production order relates to a build order placed by a client at a predetermined interval (Last Paragraph, Page 539; Paragraph 1 Page 540; Figures 13.1-13.2, 15.2; Table 15.5).

Regarding Claim 17 Silver et al. teach an inventory management system and method wherein delivering a production order comprises contrasting (comparing, subtracting, etc.) the production order with inventory stocks in a facility to generate a

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surplus stock and a shortage (stock-out; net requirements; Last Paragraph, Page 602; Pages 605-606; Equation 15.1; Table 15.8).

Regarding Claim 18 Silver et al. teach an inventory management system and method wherein the surplus stock relates to a quantity where quantity of the production order is fewer than that of the inventory stock of the facility (i.e. surplus stock is when the stock on hand is greater than the production order – inherently the definition of surplus; net requirements; Last Paragraph, Page 602; Pages 605-606; Equation 15.1; Table 15.8).

Regarding Claim 19 Silver et al. teach an inventory management system and method wherein the shortage relates to a quantity where the quantity of the production order is more than the inventory stock in a facility, as a base of the actual purchase order (the definition of a shortage; net requirements; Last Paragraph, Page 602; Pages 605-606; Equation 15.1; Table 15.8).

Regarding Claim 20 Silver et al. teach an inventory management system and method wherein the forecasted purchase order (planned order release) is the difference of the forecast order (gross requirement for next time interval/period) and the surplus stock (net requirements, planned order release; Page 609; Table 15.8; Equation 15.1).

Regarding Claim 21 Silver et al. teach an inventory management system and method wherein a production quantity (upcoming production quantity) and the shortage of the day (net requirements) both add up to be the amount of the production order (projected gross requirements; Pages 607-608; Table 15.8; Equation 15.1).

Regarding Claim 22 Silver et al. teach an inventory management system and method wherein the upcoming production quantity (project gross requirements) is based on received production orders at a predetermined interval and further to calculate the average (e.g. average demand; Paragraph 1, Page 203; Paragraph 1, Page 232).

Regarding Claim 23 Silver et al. teach an inventory management system and method wherein a predetermined interval relates to a time set up by the materials requirements planning subsystem (server) based on requests of various client ends (multiple time intervals/periods; Last Paragraph, Page 611; Paragraphs 1-2, Page 612; Tables 15.1, 15.8; Figure 15.1).

Regarding Claim 24 Silver et al. teach an inventory management system and method wherein the upcoming shortage (net requirement) is the sum of the actual purchase order (planned order receipts) and the forecasted purchase order (planned order releases; Pages 608-609; Table 15.8).

Regarding Claim 25 Silver et al. teach an inventory management system and method wherein the facility (system, plant, etc.) is to distinguish production demands of various product models (products) and implement received build orders at an enterprise end (aggregate order/production planning/forecasting; Last Paragraph, Page 548; Table 15.1; Figures 13.3 15.1; Figure 15.2, Element 1).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Cheng et al., U.S. Patent No. 6,006,192, teach an inventory management and controlling system and method having a materials requirements planning server/subsystem (MRP, MRP II) wherein the system/method takes into account demand uncertainties (e.g. actual/forecasted demand differences), calculates the difference between forecasted/projected and actual demand (e.g. unsatisfied demand) and makes production and procurement decisions.

- Kennedy et al., U.S. Patent No. 6,167,380, teach an inventory and production scheduling system and method comprising determining excess/surplus demand wherein orders include forecasted, committed, allocated, requested and promised.

- Hayes, Timothy, U.S. Patent No. 7,089,196, teaches an inventory management system and method comprising optimizing/minimizing the safety stock required to meet demand uncertainties in order to avoid stock-outs in a lean manufacturing environment.

- Chiu et al., U.S. Patent Publication No. 2003/0088450, teach an inventory management system and method comprising materials planning requirements and enterprise requirement planning server/subsystem which forecasts upcoming shortages based on inventory, promised order and excess demand.

- Bose et al., Implementing JIT with MRP II (1988) teach the utilizing of hybrid (push/pull, JIT/MRP) inventory management and controlling systems/methods comprising scheduling production of orders as they arrive (JIT) and planning material requirements based on actual and forecasted demand (MRP).

- Nydick et al., An Evaluation of Variable-Demand Lot-Sizing Techniques (1989) teach several well known methods/techniques for determining the number (lot size) and timing of inventory/stocks order/replenishment as part of an inventory management system wherein actual and forecasted demand differ.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


SJ

9/30/2006


Roman Jeanty
Primary Examiner
Art Unit 3623